

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009283**Date Inspected:** 28-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB2

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB3

This crossbeam has been loaded on the ship.

OBG CROSS BEAM CB4

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During random Visual Testing (VT) of this crossbeam and the FL3 areas of OBG lifts 5E and 5W, this QA observed the following: numerous welds that do not appear to comply with the contract documents; weld identified as SSD027-PP033-021 appears to have been cut with an oxy/fuel torch; numerous nicks and notches are still present on the cut edges of the stiffeners on the FL3 panels and several arc strikes. Most of the discrepancies appear to be confined to the FL3 areas of the east and west OBGs.

This QA observed that the contractor appears to have cut completely through the base metal of partial height floor beam diaphragm component identified as X28A. The cut was made adjacent to the fillet welds joining the web plate (X28A) to the flange (X28C). Cutting the material in this location has created the need for a Complete Joint Penetration (CJP) weld that is not designated on the approved shop drawings. The fillet weld joints in this area are identified as SSD027-034-139 and 140. AWS D1.5 2002 section 6.5.1 states "The Inspector shall make certain that the size, length, and location of all welds conform to the requirements of this code and to the detail drawings and that no unspecified welds have been added without approval". This QA informed ABF QA inspector identified as Mr. Kevin Chen and ZPMC QA identified as Mr. Wang Lu of the above mentioned issue and that an incident report would be generated. See attached photos for details.

OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB7

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB8

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB9

This QA observed ZPMC qualified welding personnel identified as 053609 perform FCAW welding on weld joint identified as CB202G-020-148. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as 053742 perform FCAW welding on weld joint identified as CB202G-019-148. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general

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compliance with WPS-B-T-2132.

OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

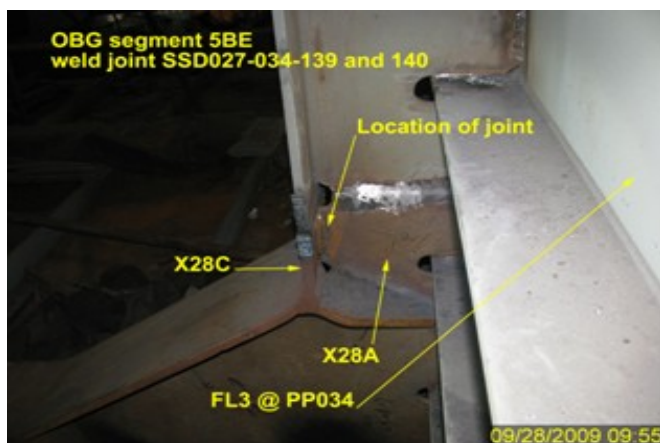
OBG CROSS BEAM CB13

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB16

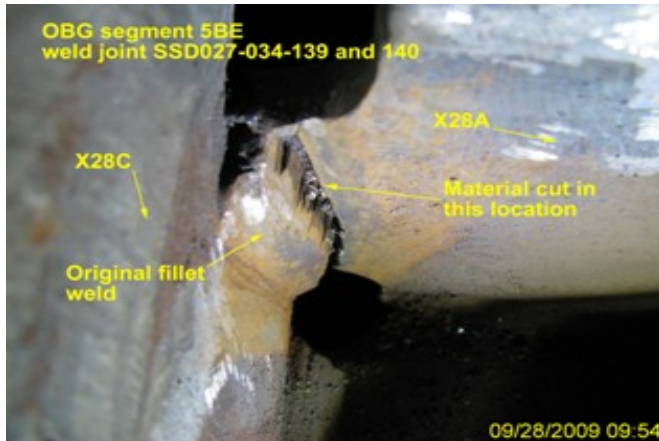
This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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Summary of Conversations:

As mentioned above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
